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## United States Department of Agriculture,

## BUREAU OF CHEMISTRY.

C. L. ALSBERG, CHIEF OF BUREAU.

## SERVICE AND REGULATORY ANNOUNCEMENTS.

## No. 19.

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## FOOD INSPECTION DECISION 169.—EDIBLE VEGETABLE FATS AND OILS.

The following definitions and standards for edible vegetable fats and oils were adopted by the Joint Committee on Definitions and Standards August 7, 1916, and were approved by the Association of American Dairy, Food, and Drug Officials August 10, 1916, and by the Association of Official Agricultural Chemists November 22, 1916:

*Edible fats and edible oils* are such glycerids of the fatty acids as are recognized to be wholesome foods. They are dry and sweet in flavor and odor.

*Cacao butter, cocoa butter*, is the edible fat obtained from sound cacao beans (*Theobroma cacao* L.), either before or after roasting.

*Coconut oil, copra oil*, is the edible oil obtained from the kernels of the coconut (*Cocos nucifera* L. or *Cocos butyracea* L.).

*Cochin oil* is coconut oil prepared in Cochin (Malabar).

*Ceylon oil* is coconut oil prepared in Ceylon.

*Corn oil, maize oil*, is the edible oil obtained from the germ of Indian corn, maize (*Zea mays* L.).

*Cottonseed oil* is the edible oil obtained from the seed of the cotton plant (*Gossypium herbaceum* L.), or from the seed of other species of *Gossypium*.

*Olive oil, sweet oil*, is the edible oil obtained from the sound, mature fruit of the olive tree (*Olea europaea* L.).

*Palm kernel oil* is the edible oil obtained from the kernels of the fruit of the palm tree (*Elaeis guineensis* L. or *Elaeis melanococca* Gärt.).

*Peanut oil, arachis oil, earthnut oil*, is the edible oil obtained from the peanut (*Arachis hypogaea* L.).

*Poppy seed oil* is the edible oil obtained from the seeds of the poppy (*Papaver somniferum* L.).

*Rape seed oil, rape oil, colza oil*, is the edible oil obtained from the seed of the rape plant (*Brassica napus* L.), or from the seed of closely related Brassica species, which yield oils similar in composition and character to the oil obtained from the seed of *Brassica napus* L.

*Soy bean oil, soy oil, soja oil*, is the edible oil obtained from the seed of the soy bean plant (*Glycine soja* L.; *Soja hispida*, Sieb et Zucc.; *Soja max.* (L.) Piper).

*Sesame oil, gingili oil, teel oil, benne oil*, is the edible oil obtained from the seed of the sesame plant (*Sesamum indicum*, De Candolle; *Sesamum radiatum*, Schum and Thonn; *Sesamum orientale* L.).

*Sunflower oil* is the edible oil obtained from the seed of the sunflower (*Helianthus annuus* L.).

The foregoing definitions and standards are adopted as a guide for the officials of this department in enforcing the Food and Drugs Act.

D. F. HOUSTON,

*Secretary of Agriculture.*

WASHINGTON, D. C., *January 9, 1917.*

NOTICE OF PUBLIC HEARING REGARDING DETAINED IMPORTS OF FOODS AND DRUGS.

The Bureau of Chemistry, following requests that it publish, in its Service and Regulatory Announcements, notices concerning the detention of foods and drugs offered for import at ports of entry, because of the fact that they may be in violation of the Federal Food and Drugs Act, has called a public hearing at which those interested may state their views.

The hearing will be held on Tuesday, March 20, 1917, at 10 a. m., at the Bureau of Chemistry, 216 Thirteenth Street SW., Washington, D. C.

Those unable to attend the meeting are requested to present their views in writing to the bureau on or before that date.

The bureau desires particularly to obtain expressions as to the value of publishing information relative to detained products, as to the form such publication should take, and as to whether such publication would tend to injure a consignee who is importing foods and drugs from abroad which he has had no opportunity of inspecting prior to their arrival and detention at the port of entry.

195. TENTATIVE STANDARDS FOR CARAWAY SEED, CUMIN SEED, POPPY SEED, LAVENDER FLOWERS, AND SAGE LEAVES.

The following tentative standards have been adopted as a guide for the officials of the Department of Agriculture in the enforcement of the Food and Drugs Act.



Caraway seed, the fruit of *Carum carvi* L.:

|                                |                                |
|--------------------------------|--------------------------------|
| Harmless foreign material..... | Not more than 3.0 per cent.    |
| Ash.....                       | Not more than 8.0 per cent.    |
| Acid-insoluble ash.....        | Not more than 1.5 per cent.    |
| Ethereal oil.....              | Pending further investigation. |

Cumin seed, the fruit of *Cuminum cyminum* L.:

|                                |                                |
|--------------------------------|--------------------------------|
| Harmless foreign material..... | Not more than 4.0 per cent.    |
| Ash.....                       | Not more than 8.5 per cent.    |
| Acid-insoluble ash.....        | Not more than 1.5 per cent.    |
| Ethereal oil.....              | Pending further investigation. |

Poppy seed, the seed of *Papaver somniferum* L.:

|                                |                             |
|--------------------------------|-----------------------------|
| Harmless foreign material..... | Not more than 3.0 per cent. |
| Ash.....                       | Not more than 8.0 per cent. |
| Acid-insoluble ash.....        | Not more than 1.5 per cent. |

Lavender flowers, the flowers of *Lavandula officinalis* Chaix.:

|  |                              |
|--|------------------------------|
| Stems and other harmless foreign material... | Not more than 10.0 per cent. |
| Ash.....                                     | Not more than 9.0 per cent.  |
| Acid-insoluble ash.....                      | Not more than 1.5 per cent.  |

Sage leaves, the leaves of *Salvia officinalis* L.:

|   |                              |
|---|------------------------------|
| Stems (excluding petioles) and other harmless foreign material..... | Not more than 12.0 per cent. |
| Ash.....  | Not more than 10.0 per cent. |
| Acid-insoluble ash.....   | Not more than 1.0 per cent.  |

#### 196. DIGITALIS.

Examination of samples of importations of "digitalis" leaves has disclosed that the article consisted of *Digitalis thaspi* and not *Digitalis purpurea*. *Digitalis thaspi* is not official in the United States Pharmacopœia, and, so far as the bureau is informed, is not recognized in the pharmacopœia of any other country. Material obtained from *Digitalis thaspi* should not be used in any of the pharmaceutical preparations official in the Pharmacopœia.

#### 197. KAMALA.

The department will recommend the exclusion from the United States of any importation of kamala which, upon examination, is found to contain more than 8 per cent of ash.

#### 198. IMPORTATION OF HYOSCYAMUS MUTICUS FOR PREPARATION OF THE ALKALOID HYOSCYAMINE.

The bureau has received a request for an opinion concerning the importation of *Hyoscyamus muticus*. The species appears to be chemically different from *Hyoscyamus niger* (Henbane), the only species of *Hyoscyamus* now recognized in the United States Pharmacopœia, in that it contains a liquid base which has not been isolated from *Hyoscyamus niger* and does not contain scopolamine. The material obtained from *Hyoscyamus muticus* consequently may not be used in any of the pharmaceutical preparations official in the Pharmacopœia.

No objection is entertained, however, to the importation of *Hyoscyamus muticus*, if properly labeled, for use in the preparation of the alkaloid hyoscyamine.

199. IPECAC (CEPHAELIS IPECACUANHA).

Examination of samples of importations of "ipecac" has disclosed that *Heteropteris pauciflora*, *Ipecacuanha fibrosa*, and an *Ionidium* species have been substituted for *Cephaelis ipecacuanha*. These substitutes are not official in the United States Pharmacopœia, and, so far as the bureau is informed, are not official in the pharmacopœia of any other country. Since these substitutes do not contain the active principles of *Cephaelis ipecacuanha*, the department will recommend the exclusion from the United States of importations of "ipecac" found to consist of any of the above-mentioned adulterants.

200. SENNA.

Examination of samples of importations of "senna" leaves has disclosed that the material contained considerable amounts of *Tephrosia apollinea*. Since species of *Tephrosia* contain a toxic glucosid, tephrosin, the department will recommend the exclusion from the United States of the importation of senna containing the leaves of any species of *Tephrosia*.

201. CALIFORNIA PINK BEANS.

The bureau understands that the type of beans known as pink beans or California pink beans differs from red beans and from kidney beans and it is considered that the use of the terms "red beans" or "kidney beans" would be misleading when applied to pink beans or California pink beans. Furthermore, in view of the definite commercial significance attached to the expression "kidney bean," it is held that the word "kidney" should not appear upon the label of pink beans.

202. SOY BEANS.

The term "beans" appearing on the label of canned beans, in the opinion of the bureau, conveys the impression that the beans are pea or medium beans. Cans containing soy beans, or beans of any variety other than pea or medium beans should be labeled so as to show plainly the name of the variety.

203. THE ADDITION OF RICE HULLS TO RICE BY-PRODUCT FEEDS.

The addition of ground rice hulls to the feeds obtained as rice by-products from the stone reel, the huller reels, the pearling cones, or the brush machine of a rice mill, or to mixtures of these products, is considered by the department to constitute an adulteration under the Food and Drugs Act unless the fact of such addition is clearly stated upon the label of the product.

## 204. TREASURY DECISION 36706—SPIRITS FROM THE UNITED KINGDOM.

TREASURY DEPARTMENT, *October 2, 1916.**To collectors of customs and others concerned:*

In accordance with a request of the Secretary of Agriculture, the appended copy of a press notice to importers of spirits from the United Kingdom of Great Britain and Ireland and of the certificate referred to therein are published for the information and guidance of collectors of customs and others concerned.

ANDREW J. PETERS,  
*Assistant Secretary.*

**Notice to importers of spirits from the United Kingdom of Great Britain and Ireland.**

*Washington, D. C.*

The United States Department of Agriculture to-day issued a notice calling to the attention of importers the "immature spirits (restriction) act, 1915, of the United Kingdom of Great Britain and Ireland, which enacts that 'no British or foreign spirits shall be delivered for home consumption unless they have been warehoused for a period of at least three years.'"

Exception is made in the case of spirits delivered to a manufacturing chemist or manufacturer of perfume for use in their manufactures, to spirits delivered for scientific purposes, and to imported Geneva and perfumed spirits and foreign liqueurs.

The food and drugs act, June 30, 1906, provides that any article of food or drug offered to be imported into the United States if "of a kind forbidden entry into, or forbidden to be sold or restricted in sale in, the country in which it is made or from which it is exported shall be refused admission."

The Department of State has advised that the commissioners of customs and excise have authorized local collectors in the United Kingdom to supply on demand to shippers a certificate to accompany shipments of spirits from the United Kingdom of Great Britain and Ireland to the United States to the effect that the goods meet the requirements imposed by the immature spirits (restriction) act, 1915, on goods intended for home consumption.

Accordingly, shipments of spirits from the United Kingdom, if offered for entry into this country on and after December 1, 1916, will be refused admission if not accompanied by a certificate of the nature indicated above.

The certificate should be attached to the copy of the invoice to which is attached consular Form 198, "Declaration of shipper of food and drug products," noting on all other copies of the invoice that the certificate has been so attached. American importers wishing additional details as to the form of certificate issued by British excise officers should write to the Bureau of Chemistry, United States Department of Agriculture, Washington.

**Spirits exported to the United States of America—immature spirits (restriction) act, 1915.**

*To the officer of customs and excise:*

The spirits contained in the undermentioned packages, which were delivered for exportation to the United States of America on the — day of —, 191—, are not of a kind which is forbidden entry into or forbidden to be sold or restricted in sale in the United Kingdom of Great Britain and Ireland (a) for consumption, (b) for the purpose of making medicines.



(c) — request a certificate that this statement is true.

Signature\_\_\_\_\_

Date\_\_\_\_\_

*Particulars of spirits exported.*

| Kind of spirits. | Marks and numbers of packages. | Number of casks or cases. | Proof quantity. |
|------------------|--------------------------------|---------------------------|-----------------|
| .....            | .....                          | .....                     | .....           |
| .....            | .....                          | .....                     | .....           |
| .....            | .....                          | .....                     | .....           |

(a) (b) Cancel inappropriate section.

(c) "I" or "we."

(d) As evidence of the validity of this certificate, the customs and excise official stamp must be impressed on the document immediately below the particulars given above.

(d) I certify that the official records show that the above statement is correct.

....., Officer of customs excise.

....., Station.

....., Port of collection.

Date ———, 191—.

**205. RESTRICTION ACT NOT OPERATIVE IN BRITISH COLONIES.**

This department has been informed by the British Embassy, through the State Department, that the Immature Spirits (Restriction) Act, 1915, of the United Kingdom of Great Britain and Ireland, is operative only in the United Kingdom and not in the dependencies of the British Empire, unless such an act is passed in those colonies.

**206. VENEERING OF BALED HAY.**

The Department of Agriculture is investigating the practice of veneering or facing bales of hay. Veneering consists in feeding to the baling machine an occasional forkful of hay that is of higher grade than the bulk of the lot being baled and manipulating the forkful in such a way that the high-grade hay covers the outside of the bale, making the bale appear to contain better hay than it actually does contain. Hay veneered in such manner as to conceal inferiority is regarded as a violation of the Food and Drugs Act.

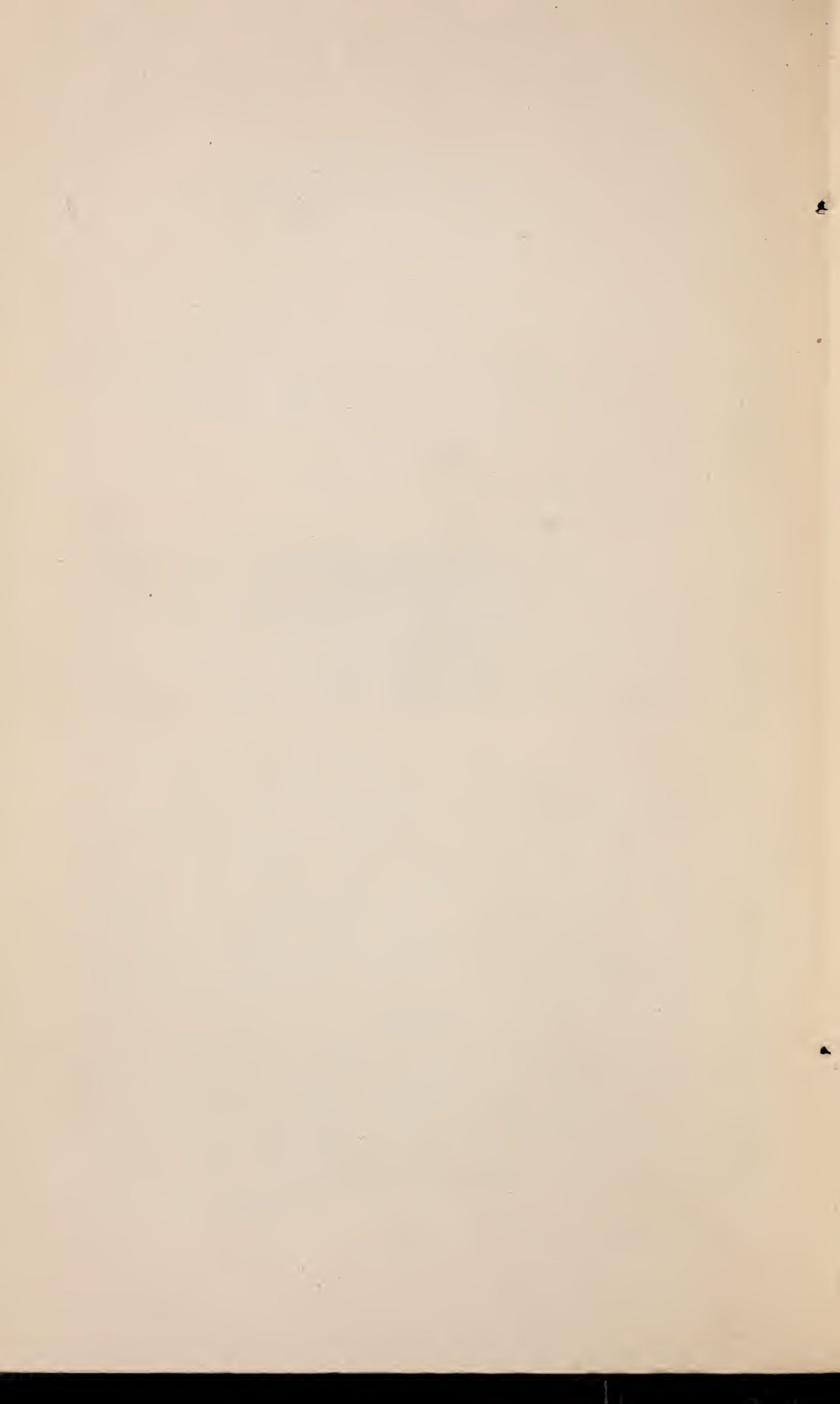
**DIRECTORY OF FEDERAL AND STATE DAIRY, FOOD, DRUG, AND FEEDING STUFFS OFFICIALS.**

The list of Federal and State dairy, food, drug, and feeding stuffs officials published in Service and Regulatory Announcements, Chemistry 14, has been corrected to October 1, 1916, in accordance with information in the possession of the Bureau of Chemistry, and issued in the form of a separate directory, copies of which are available for distribution to State officials and to those who have occasion to refer to these officials.



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## United States Department of Agriculture,

BUREAU OF CHEMISTRY.

C. L. ALSBERG, CHIEF OF BUREAU.

## SERVICE AND REGULATORY ANNOUNCEMENTS.

No. 20.

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**FOOD INSPECTION DECISION 170.—SWEETENED CONDENSED MILK, CONDENSED SKIMMED MILK, SWEETENED CONDENSED SKIMMED MILK, DRIED MILK, DRIED SKIMMED MILK, AND MALTED MILK.**

The following definitions and standards for sweetened condensed milk, condensed skimmed milk, sweetened condensed skimmed milk, dried milk, dried skimmed milk, and malted milk were adopted by the Joint Committee on Definitions and Standards, August 7, 1916,

and were approved by the Association of American Dairy, Food, and Drug Officials, August 10, 1916, and by the Association of Official Agricultural Chemists, November 22, 1916:

*Sweetened condensed milk, sweetened evaporated milk, sweetened concentrated milk*, is the product resulting from the evaporation of a considerable portion of the water from the whole, fresh, clean, lacteal secretion obtained by the complete milking of one or more healthy cows, properly fed and kept, excluding that obtained within fifteen days before and ten days after calving, to which sugar (sucrose) has been added. It contains, all tolerances being allowed for, not less than twenty-eight per cent (28.0%) of total milk solids and not less than eight per cent (8.0%) of milk fat.

*Condensed skimmed milk, evaporated skimmed milk, concentrated skimmed milk*, is the product resulting from the evaporation of a considerable portion of the water from skimmed milk, and contains, all tolerances being allowed for, not less than twenty per cent (20.0%) of milk solids.

*Sweetened condensed skimmed milk, sweetened evaporated skimmed milk, sweetened concentrated skimmed milk*, is the product resulting from the evaporation of a considerable portion of the water from skimmed milk to which sugar (sucrose) has been added. It contains, all tolerances being allowed for, not less than twenty-eight per cent (28.0%) of milk solids.

*Dried milk* is the product resulting from the removal of water from milk, and contains, all tolerances being allowed for, not less than twenty-six per cent (26.0%) of milk fat, and not more than five per cent (5.0%) of moisture.

*Dried skimmed milk* is the product resulting from the removal of water from skimmed milk and contains, all tolerances being allowed for, not more than five per cent (5.0%) of moisture.

*Malted milk* is the product made by combining whole milk with the liquid separated from a mash of ground barley malt and wheat flour, with or without the addition of sodium chlorid, sodium bicarbonate, and potassium bicarbonate in such a manner as to secure the full enzymic action of the malt extract and by removing water. The resulting product contains not less than seven and one-half per cent (7.5%) of butter fat and not more than three and one-half per cent (3.5%) of moisture.

The foregoing definitions and standards are adopted as a guide for the officials of this department in enforcing the Food and Drugs Act.

D. F. HOUSTON,

*Secretary of Agriculture.*

WASHINGTON, D. C., March 16, 1917.

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#### 207. ACONITE ROOT SUBSTITUTE.

Examination of samples of aconite obtained in import and interstate trade has disclosed that aconites not recognized in the United States Pharmacopœia, especially "Japanese aconite" (*Aconitum fisheri* Reich.), have been substituted in some instances for the official aconite (*Aconitum napellus* L.). This substitute is not official in the United States Pharmacopœia and, as far as this bureau is informed, is not official in the pharmacopœia of any other country. These substitutes do not contain aconitine, but other alkaloids. Aconites obtained from species other than *Aconitum napellus* should be



labeled so as to indicate the geographical source and, preferably, also the botanical source, with the additional statement, "Not recognized in the U. S. P.," and should not be used in any of the pharmaceutical preparations of aconite official in the Pharmacopœia.

It may be pointed out that Japanese aconite usually consists of mother (with stem bases) and daughter tubers (with buds), which may be distinguished from those of the official aconite, *Aconitum napellus*, by their much smaller size and weight, less wrinkled and not twisted appearance, more or less short conical shape, generally more mealy condition due to starch, and microscopically by the different arrangement of the fibro-vascular bundles, which is usually not so markedly star shaped.

#### 208. ARNICA FLOWERS SUBSTITUTE.

Examination of samples imported as "arnica flowers" has disclosed that *Inula britannica* L. has been substituted in some instances for *Arnica montana* L. This substitute is not official in the United States Pharmacopœia and, so far as the bureau is informed, is not official in the pharmacopœia of any other country. Since *Arnica montana* contains active principles which are not found in *Inula britannica* L., the latter is not a proper substitute for *Arnica montana*. The department will recommend the exclusion from the United States of importations of any products offered for entry as "arnica flowers," but found to consist wholly or in part of flowers of *Inula britannica* L.

The striking differences between the authentic product and the adulterant are that in the adulterant the length of the young achene (undeveloped fruit) is very much shorter, about 1 millimeter long, while it is from 5 to 7 millimeters in the genuine product. The ligulate (ray) flowers are also considerably smaller in length and width than those of the true arnica flowers. The veins number four in the ligulate (ray) flowers of *Inula britannica* L., while 10 have been observed in those of arnica and 7 to 12 are reported in the literature. The receptacle (the enlarged end of the flowering stalk) is smooth in the flowers of *Inula britannica* L., but hairy in true arnica flowers. There is an abundance of hairlike structures of certain flower parts developed in both species, which are the cause of a somewhat similar appearance of the products.

#### 209. BELLADONNA LEAVES SUBSTITUTE.

Examination of samples of importations of "belladonna leaves" has disclosed that *Solanum nigrum* L. has been substituted in some instances for the true material. Since this species contains alkaloids other than those present in the genuine belladonna (*Atropa belladonna* L.), official in the United States Pharmacopœia, the department will recommend the exclusion from the United States of

any shipment labeled "Belladonna leaves" but consisting wholly or in part of *Solanum nigrum*.

**210. BUCHU LEAVES SUBSTITUTE.**

Attention is called to the fact that samples labeled as "long," "short," and "oval" buchu leaves and offered in the trade have been found to be obtained from species not official in the United States Pharmacopœia. The "long buchu" proved to be *Empleurum serratulatum* Sol. et Ait., the "short buchu" was identified as *Barosma pulchellum*, Bartling and Wendland, and the "oval buchu" was identified as *Barosma crenulata* Hook. var. *latifolia*. The sizes of the leaves are distinctly different from those of the two official species, *Barosma betulina* (Thunberg) Bartling and Wendland, and *Barosma serratifolia* (Curtis) Willdenow, given in the Pharmacopœia. The flavor also of the three adulterants, especially that of *Empleurum serratulatum* and *Barosma pulchellum*, is markedly different from that of the official species.

Material obtained from the above-mentioned unofficial species should not be used in official preparations, and the department will recommend the exclusion from the United States of shipments of any such material unless properly labeled.

**211. DANDELION ROOT OF INFERIOR QUALITY.**

Examination of samples from a recent importation of dandelion root, *Taraxacum officinale*, Weber, disclosed the presence of about 40 per cent of roots which were badly discolored inside and did not show a porous, pale yellow wood, as required by the United States Pharmacopœia, IX, 1916. The appearance suggested that the material had been improperly dried. This fact was confirmed by microscopic examination showing swollen brownish-yellow masses, indicating that the inulin masses had been partially hydrolyzed and caramelized. The department will recommend the exclusion from the United States of any importation of dandelion root which upon examination is found to contain more than 15 per cent of dead roots and roots that are more than slightly discolored as a result of improper drying.

**212. HOREHOUND SUBSTITUTE.**

Examination of samples of importations of so-called "horehound" has disclosed that the material in some instances consisted of *Ballota hirsuta* Benth. instead of *Marrubium vulgare* L. Material obtained from *Ballota hirsuta* should not be labeled or sold as and for horehound nor used as a substitute therefor.

**213. MUSTARD SEED STANDARD AND ASSAY METHOD.**

Mustard seed is the ripe seed of *Sinapis alba* L. (white mustard), *Brassica nigra* (L.) Koch (black mustard), *Brassica juncea* Hook. f. et Th. or the varieties or closely related species of the types of



*Brassica nigra* and *Brassica juncea* Hook. f. et Th., e. g., *Brassica cernua* Thunb., containing not more than 5 per cent of other seeds or other foreign matter and yields not more than 5 per cent of total ash nor more than 1.5 per cent of ash insoluble in hydrochloric acid. Mustard seed, except that obtained from *Sinapis alba* L., yields a volatile oil similar in character and composition to the volatile oils yielded by the above-mentioned species, and when assayed by the method outlined below the yield of volatile oil is not less than 0.6 per cent, calculated as allylisothiocyanate:

METHOD FOR THE DETERMINATION OF VOLATILE OIL IN MUSTARD SEED.

Place 5 grams of the ground seed (No. 20 powder) in a 200-mil flask, add 100 mls of water, stopper tightly, and macerate for two hours at about 37° C. Then add 20 mls of U. S. P. alcohol (95 per cent), and distill about 60 mls into a 100-mil volumetric flask containing 10 mls of 10 per cent ammonium hydroxid solution, taking care that the tip of the condenser dips below the surface of the ammonium hydroxid solution. Add 20 mls of 0.1 N silver nitrate solution to the distillate, set aside over night, heat to boiling on a water bath (in order to agglomerate the silver sulphid), cool, make up to 100 mls with water, and filter. Acidify 50 mls of the filtrate with about 5 mls of concentrated nitric acid and titrate with 0.1 N ammonium thiocyanate, using 5 mls of 10 per cent ferric ammonium sulphate solution for an indicator. Each mil of 0.1 N silver nitrate consumed equals 0.004956 grain of allylisothiocyanate.

214. STRAMONIUM LEAVES SUBSTITUTE.

Examination of samples of importations of "stramonium leaves" has disclosed that *Xanthium strumarium* L. has been substituted in some instances for the true material. The examination further showed the absence of the alkaloids characteristic of the drug of the genuine stramonium leaves, *Datura stramonium* L., official in the United States Pharmacopœia. The department will recommend the exclusion from the United States of any shipment labeled "stramonium leaves" but consisting wholly or in part of *Xanthium strumarium*.

215. UNICORN ROOT OF INFERIOR QUALITY.

Samples of true unicorn root, *Aletris farinosa* L., obtainable in interstate trade, have been examined. As a result of this study it was found that excessive amounts of total ash and acid-insoluble ash (sand) were present. In a few instances the limit of 16 per cent given in the new National Formulary was exceeded. The bureau is of the opinion that material properly collected would contain not more than 10 per cent of total ash, and the amount of insoluble ash would be considerably below 5 per cent. Of special interest is the fact that one sample which contained about 3 per cent of true unicorn root consisted otherwise entirely of false unicorn root, *Chamaelirium luteum*.

The department will regard as adulterated or misbranded under the Food and Drugs Act any unicorn root containing total ash in excess of 16 per cent or which contains material other than true unicorn root, *Aletris farinosa*.

**216. VIBURNUM OPULUS SUBSTITUTE.**

A recent survey of the *Viburnum* barks on the market showed that while all samples of black haw (*Viburnum prunifolium*, U. S. P.) examined proved to be genuine, in most instances the bark of mountain maple (*Acer spicatum* Lam.) has been substituted for true cramp bark (*Viburnum opulus*, N. F.). A similar survey of preparations of *Viburnum opulus* L. on the market, especially of fluid extracts, indicates that most of them also were prepared from *Acer* species, very probably from *Acer spicatum*.

The bark of *Acer spicatum* may be distinguished from that of *Viburnum opulus* by its fracture, which is fibrous, due to the presence of large and numerous groups of long bast fibers, while that of *Viburnum opulus* is short and weak, since it has no bast fibers, or the bast fibers, if present, are few and scattered. The barks may, furthermore, be distinguished by the color which develops when a drop of 1 per cent or 0.1 per cent ferric chlorid solution is placed on the inner surface of the bark. After several minutes a blue color develops in the case of *Acer spicatum*, while in the case of *Viburnum opulus* a green color develops, due in both instances to the tannins presents in the barks. If woody tissue is present on the inner surface of the bark, it should be removed before making the test.

The bureau will consider as adulteration the substitution in whole or in part of any *Acer* species for *Viburnum opulus* in barks or their preparations.

The bureau also considers that the term "cramp bark" applies only to *Viburnum opulus*, now official in the National Formulary, and consequently should not be used for barks from other sources or their preparations.

**217. AMENDMENT NO. 5 TO INTERSTATE QUARANTINE REGULATIONS, 1916. PROHIBITING THE INTERSTATE TRANSPORTATION OF OYSTERS AND CLAMS GROWN OR HANDLED UNDER INSANITARY CONDITIONS.**

TREASURY DEPARTMENT,  
OFFICE OF THE SECRETARY,  
Washington, February 12, 1917.

*To medical officers of the U. S. Public Health Service, State and local health authorities, and others concerned:*

The following addition is hereby made to the Interstate Quarantine Regulations promulgated by this department January 15, 1916, said addition and regulations being in accordance with the act of Congress approved February 15, 1893.



The following regulation, section 38, is hereby added to the Interstate Quarantine Regulations:

SEC. 38. After notification in writing by the proper health authorities, common carriers shall not transport nor accept for transportation in interstate traffic, nor shall any person, firm, or corporation offer for transportation in interstate traffic, any oysters, clams, or other shellfish which have been grown, fattened, or handled in such a way as to render them liable to become agents in the interstate spread of disease, and the Surgeon General of the United States Public Health Service shall from time to time cause sanitary inspections to be made by officers of the Public Health Service of beds used for growing or fattening oysters, clams, or other shellfish and of shucking houses and other similar places in which oysters, clams, or other shellfish are shucked or otherwise prepared for interstate shipment, and he may forbid the interstate shipment of any such oysters, clams, or other shellfish which are produced or handled in a manner which will render them liable to become agents for the interstate spread of disease.

W. G. McADOO, *Secretary*.

#### 218. LABELING OF TUNA AND SIMILAR FISH.

Consultation of authorities upon the subject shows that there is no tuna family as such, but that tuna and similar fish are members of the *Scombridae* or mackerel family.

The true or leaping tuna is of the genus *Thunnus* of the above family. The members of the genus *Germo* are closely related to the true tuna and according to common usage may be considered as also being entitled to the designation "tuna." The bureau therefore, after consultation with the Bureau of Fisheries, considers that the following fish may properly be called tuna:

Leaping tuna, *Thunnus thynnus*.

Long-finned tuna, *Germo alalunga*.

Yellow-fin tuna, *Germo macropterus* or *Germo germo*.

At the present time the bureau does not consider it necessary for a statement of the actual species of tuna to appear upon the label. Fish designated as tuna should, however, be one of the species enumerated above.

The words "tuna" and "tunny" are considered synonymous when applied to fish. The choice of one or the other of these words depends mainly upon the locality, tuna being more generally used on the Pacific coast.

"Albacore" strictly is the name for the members of the genus *Germo*, but is also frequently applied to the *Thunnus*, so that any fish properly called "tuna" may also be called "albacore."

Certain fish which are sometimes, although incorrectly, called little tunnies, bonito tuna, or ocean bonito, are members of the genus *Gymnosarda*. The species are the *Gymnosarda pelamis* and *Gymnosarda alleterata*. They are not true tuna, although closely related. Long standing and general usage, particularly in Europe,

justifies the use of the word "tuna" if properly qualified in describing them. The Bureau of Fisheries states that the designation "striped tuna" is sanctioned by usage and is sufficiently descriptive to distinguish these fish from those of the genera *Thunnus* and *Germo*. The designation "little tuna" or "little tunny" as applied to *Gymnosarda* is objectionable owing to the probability of its being misinterpreted or misunderstood to mean a young fish of another species. The designation "bonito tuna" or "ocean bonito" as applied to *Gymnosarda* is misleading, as the true bonito is not a tuna or striped tuna, but is a different fish belonging to the genus *Sarda*.

The genus *Sarda* includes:

Bonito or bonita, *Sarda sarda*.

California bonito or skipjack, *Sarda chilensis*.

These fish should not be designated as "tuna," with or without qualification, but should be sold under their own names. The Bureau of Fisheries considers bonito of quality equal to, or better than, tuna and believes that if marketed under its own name and upon its own merits it would be received favorably by the consuming public.

The fish sometimes, but improperly, called "yellow-tail tuna" is not a tuna. This species is the *Seriola dorsalis* and belongs to the Carangidæ or pompano family. The proper name for this fish is the "yellow tail." The term "amber fish" has also been used to designate this species, and the bureau offers no objection to the use of that term. It is improper to use the family name "pompano" or "pampano" to designate the species *Seriola dorsalis*.

#### 219. BEANS CONTAINING PRUSSIC ACID DENIED ENTRY.

Beans offered for entry into this country from India or the East Indian Colonies, commonly known as Indian, Java, Kratok, Moon, Rangoon, or Burma, and representing certain varieties of *Phaseolus lunatus*, have been found to contain hydrocyanic acid. The importation of or trade in these beans is restricted in certain European countries. The department will recommend the exclusion of any importation of beans which upon examination are found to contain any appreciable amount of hydrocyanic acid, on the ground that they might be dangerous to the health of the people of the United States.

#### 220. GREEK CURRANT JELLY.

In this country the article known as currant jelly is commonly made from red or white currants (*Ribes rubrum*), although black currants (*Ribes nigrum*) are sometimes used. An article made from any variety of raisin or raisin grape is not entitled to be called currant jelly without qualification. The Greek, or Zante, currant (*Vitis*



*vinifera*) is a variety of raisin or raisin grape. The jelly made from Greek currant is, therefore, not entitled to be called currant jelly, but should be labeled Greek currant jelly. Articles of food containing Greek currant jelly should not be labeled in such a manner as to indicate that they contain currant jelly.

**221. USE OF PECTIN IN JELLY.**

In the preparation of jellies and similar products from fruits which are deficient in pectin no objection is made to the addition of pectin in small quantities when the addition of the pectin does not serve to conceal damage or inferiority, for example, inferiority due to the use of an insufficient amount of fruit, or to introduce any ingredients which may render the product injurious to health, provided the presence of the added pectin is declared on the label, and provided further that the pectin has been prepared from clean and sound materials.

**222. "HONEYDEW" HONEY SHOULD BE SO LABELED.**

Circular 19, Standards of Purity for Food Products, states that "*Honey* is the nectar and saccharine exudations of plants gathered, modified, and stored in the comb by honey bees (*Apis mellifica* and *A. dorsata*); is lævo-rotatory, contains not more than twenty-five (25) per cent of water, not more than twenty-five hundredths (0.25) per cent of ash, and not more than eight (8) per cent of sucrose."

"Honeydew" honey usually exhibits plus rotation at 20° C., a high plus rotation of the inverted solution at 87° C., an ash content much greater than 0.25 per cent, and high nonsugar solids, and is usually characterized by a very dark color and a peculiar molasses-like flavor. The bureau is of the opinion that this product should be labeled and sold for what it actually is, namely, "Honeydew" honey, so that purchasers may not be misled to believe that it is the product commonly known as honey.

**223. USE OF THE TERM "SPARKLING" WHEN APPLIED TO FERMENTED OR UN-FERMENTED ARTIFICIALLY CARBONATED BEVERAGES.**

The bureau is of the opinion that the term "Sparkling" does not correctly describe either fermented or unfermented artificially carbonated beverages, and that it should not be applied to these articles. This opinion is supplementary to that of Item 174 in S. R. A. Chem. 17 relative to the use of the term "Sparkling Wine."

**224. LABELING OF WINES.**

It is the opinion of the bureau that the terms "Burgundy," "Champagne," and "Sauterne," without qualification, are properly applied only to products from France, and that the terms "Malaga" and "Tokay," without qualification, are properly applied only to products from Spain and Hungary, respectively. A wine produced in a

country other than that specified for the kind mentioned, which possesses all the characteristics of the particular wine as produced in the specified foreign country, will not be regarded as misbranded if the terms "Burgundy," "Champagne," "Sauterne," "Malaga," or "Tokay," as the case may be, are qualified by the name of the State or country where the wine is produced. The geographical qualification should be displayed with prominence equal to that of the name which it qualifies.

**225. DECLARATION OF THE QUANTITY OF THE CONTENTS OF MUSHROOMS, OLIVES, AND PICKLES IN PACKAGE FORM. (AMENDING OPINION 77, S. R. A. CHEM. 8, AND OPINION 99, S. R. A. CHEM. 11.)**

The bureau has investigated trade usage in the packing and sale of olives in brine, mushrooms in brine, and also of pickles in brine, vinegar, and sweetened vinegar.

It is of the opinion that the quantity of the contents should be declared upon packages of mushrooms in brine in terms of the weight of the drained mushrooms.

The quantity of the contents should be declared upon packages of olives in brine in terms of the weight of the drained olives, except that, when using containers of such shapes that when filled to capacity there is no material difference between the volume of the drained product and the liquid measure of the container, the contents may be declared in terms of liquid measure of the drained olives.

Pickles in brine, vinegar, or sweetened vinegar, may be marked in terms either of weight of the drained product, of liquid measure of the drained article, or of numerical count in accordance with the usual trade practice for the particular article. This opinion is not intended to apply to chowchow or similar relishes, the quantity of which may be declared as a whole.

**226. USE OF STANDARD CONTAINERS DOES NOT OBTVIATE NECESSITY FOR DECLARATION OF QUANTITY OF CONTENTS REQUIRED BY NET WEIGHT AMENDMENT.**

Numerous inquiries have come to the bureau regarding the requirements of the Net Weight Amendment to the Food and Drugs Act as applied to food products in standard barrels and to small fruits in climax baskets, and in other standard containers, in view of the requirements of the Standard-Barrel Act (Mar. 4, 1915) and the Standard-Container Act (Aug. 31, 1916).

The bureau is of the opinion that these laws in nowise conflict in their requirements, and that in case of food in package form, even though standard containers are used, it is necessary to mark the packages with the quantity of the contents. It will be noted that paragraph (e) of Regulation 29, as amended by Food Inspection Decision 168, admits of the use of the term "one United States standard barrel" as a unit of dry measure for use upon standard barrels which are filled to capacity with food products.



This opinion is not intended to revoke the previous public announcement (Item 155, S. R. A. Chem. 16) to the effect that, pending a determination of the question whether the Net Weight Amendment applies to berries in small open containers, the department will not recommend proceedings under the act solely upon the ground that the individual containers bear no statement of the quantity of the contents. As previously announced, however, the department is of the opinion that crates containing berries, peaches, and tomatoes in small open containers constitute food in package form, and the law requires that the crates be marked with a statement of the quantity of the contents, which statement should include the number of small containers and the quantity of the contents of each.

<sup>1</sup> 227. TREASURY DECISION 37125. FOOD AND DRUGS ACT—SPIRITS FROM THE UNITED KINGDOM. GIN EXEMPTED UNDER THE PROVISIONS OF THE BRITISH RESTRICTION ACT.—T. D. 36706 OF OCTOBER 2, 1916, MODIFIED.

TREASURY DEPARTMENT, *April 18, 1917.*

*To collectors of customs and others concerned:*

The department is advised by the Secretary of Agriculture that information has been received from the British Foreign Office, through the State Department, to the effect that "domestic" gin (manufactured in Great Britain) is exempted from the restrictions on immature spirits under the provisions of section 1 (1) (b) (i) of the Immature Spirits (Restriction) Act, 1915. This product will, therefore, not be subject to the requirement of T. D. 36706 (Item 204, S. R. A. Chem. 19), that shipments of spirits of British origin be accompanied by a certificate to the effect that the goods have been warehoused for a period of at least three years.

BYRON R. NEWTON, *Assistant Secretary.*

#### STATE DAIRY, FOOD, DRUG, AND FEEDING STUFFS OFFICIALS.

The following changes among State officials have been noted since the announcement of the directory of Federal and State dairy, food, drug, and feeding stuffs officials in Service and Regulatory Announcements, Chemistry 19, page 54.

*Colorado.*—S. R. McKelvey, Food and Drug Commissioner, State Board of Health, Capitol Building, Denver, in charge of foods, drugs, and feeding stuffs, succeeding John Lynch.

*Florida.*—A. M. Henry,<sup>2</sup> Assistant State Chemist, Department of Agriculture, Tallahassee.

*Georgia.*—J. J. Brown,<sup>3</sup> Commissioner of Agriculture, Atlanta, succeeding J. D. Price; W. C. Dumas, Chief Chemist, Department of Agriculture, Atlanta, in charge of foods, drugs, and feeding stuffs, succeeding R. E. Stallings.

*Maine.*—J. A. Roberts,<sup>3</sup> Commissioner of Agriculture, Augusta, succeeding William T. Guptill.

<sup>1</sup> Item 227 supplements items 204 and 205 in S. R. A. Cham. 19

<sup>2</sup> Collaborating chemist.

<sup>3</sup> Commissioned State official.

*Michigan.*—F. L. Woodworth,<sup>1</sup> Dairy and Food Commissioner, Lansing, in charge of foods, dairying, and drugs, succeeding James W. Helme.

*Missouri.*—E. L. Barnhouse, Food and Drug Commissioner, La Salle Building, St. Louis, in charge of foods and drugs, succeeding F. H. Fricke.

*Nebraska.*—Otto Murschel,<sup>1</sup> Deputy Commissioner, Food, Drug, Dairy, and Oil Commission, Lincoln, in charge of foods, feeding stuffs, drugs, and dairying, succeeding Clarence E. Harman.

*Oklahoma.*—R. E. Andrews, State Chemist, Guthrie.

*Utah.*—Walter M. Boyden,<sup>1</sup> Commissioner, Dairy and Food Department, Salt Lake City, succeeding Heber C. Smith.

*West Virginia.*—J. H. Stewart, Commissioner of Agriculture, Charleston, in charge of foods and drugs, succeeding H. E. Williams.

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<sup>1</sup> Commissioned State official.

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# United States Department of Agriculture.

## BUREAU OF CHEMISTRY.

C. L. ALSBERG, CHIEF OF BUREAU.

14

## SERVICE AND REGULATORY ANNOUNCEMENTS.

### No. 21.

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#### FOOD INSPECTION DECISION 171.—MACARONI, SPAGHETTI, VERMICELLI, FLOUR MACARONI, FLOUR SPAGHETTI, AND FLOUR VERMICELLI.

The following definitions and standards for macaroni, spaghetti, vermicelli, flour macaroni, flour spaghetti, and flour vermicelli were adopted by the Joint Committee on Definitions and Standards, November 18, 1916, and were approved by the Association of Official Agricultural Chemists November 22, 1916, and by the Association of American Dairy, Food, and Drug Officials August 3, 1917:

*Macaroni, spaghetti, vermicelli* are dried pastes made of the semolina of hard wheat.

They contain not more than thirteen and one-half per cent (13.5%) of moisture.

*Flour macaroni, flour spaghetti, flour vermicelli* are dried pastes made of flour or of a mixture of flour and semolina.

They contain not more than thirteen and one-half per cent (13.5%) of moisture.

The foregoing definitions and standards are adopted as a guide for the officials of this department in enforcing the Food and Drugs Act.

D. F. HOUSTON,  
*Secretary of Agriculture.*

WASHINGTON, D. C., Oct. 2, 1917.

#### 228. PUBLICATION OF NOTICE CONCERNING DETAINED IMPORTS.

Since the Food and Drugs Act became effective, it has been suggested from time to time by importers that the bureau issue announcements of the action taken on detained shipments of foods and drugs in a manner similar to those now issued as notices of judgment concerning the outcome of prosecutions under the domestic sections of the law. The issuance of notices of judgment is authorized by the act itself in all cases in which a court decree has been rendered. It is not apparent that the bureau is authorized to publish in a similar manner facts concerning detained shipments offered for entry. It is recognized, however, that it would be of advantage to the import trade generally if some plan were available by which knowledge could be acquired of the action taken by port laboratories.

To discuss this matter and to afford importers an opportunity of expressing their views on the question, a hearing was held at the bureau on March 20, 1917. It became apparent in the course of the hearing that the information, to be of value, should be specific and descriptive and that the issuance of such information could not be effected without identifying either directly or by implication the importers concerned. For this reason it was decided that since the importers had no opportunity ordinarily for investigating the character of the goods before arrival, the reflection which such publications would make would not be warranted and the bureau will not publish a list of specific detentions.

It will, however, continue to publish for the information of the trade and public generally in the Service and Regulatory Announcements items regarding new types of adulteration encountered and means of detecting such adulteration.

#### 229. BELLADONNA ROOT ADULTERANT. (YELLOW DOCK ROOT.)

Examination of samples of importations of "Belladonna Root," *Atropa belladonna* L., has disclosed that the roots of yellow dock, *Rumex crispus* L., were substituted in one instance for the true mate-



terial. The roots of *Rumex crispus* are externally reddish brown, deeply longitudinally wrinkled; finely annulate above, and have a somewhat fibrous fracture, whereas those of *Atropa belladonna* are externally pale brownish gray, show only weak longitudinal wrinkles, and have a nearly smooth fracture. The department will recommend the detention of shipments labeled "Belladonna Root," consisting wholly or in part of roots of yellow dock.

230. CANTHARIDES SUBSTITUTE. (CHINESE BLISTER FLIES.)

Examination of samples of importations of "Cantharides" (Spanish Flies), *Cantharis vesicatoria*, has disclosed that so-called Chinese Blister Flies, belonging to a species of *Myiobris*, have been substituted in some instances for the true material. The wing covers of *Myiobris* species have alternating black and yellow bands or stripes, whereas those of *Cantharis vesicatoria* are bronze green. Material obtained from *Myiobris* species should not be labeled or sold as and for Cantharides.

231. CINCCHONA BARKS. (OFFICIAL AND NONOFFICIAL.)

The department has found Cinchona barks offered for entry under names recognized in the United States Pharmacopœia but deficient in alkaloids. Such products will be detained and required to be relabeled in accordance with the requirements of the Food and Drugs Act as explained in item 180, S. R. A. Chem. 18, p. 43.

No objection will be offered to the importation, if properly labeled, of products from Cinchona species other than those recognized in the United States Pharmacopœia, for use in the preparation of alkaloids or under conditions which preclude their use in any of the pharmaceutical preparations official in the Pharmacopœia. The department will, however, recommend the exclusion from the United States of "Cinchona" found to be practically devoid of Cinchona alkaloids.

232. COUCHGRASS (DOGGRASS) ADULTERANT. (BERMUDA GRASS.)

Examination of samples of importations of "Couchgrass," *Agropyron repens* (L.) Beauvois, has disclosed that "Bermuda Grass," *Cynodon dactylon* L., has been substituted in some instances for the true material. The lack of starch and the considerable size of the endodermis cells characterize the rootstock of *Agropyron repens*, while the rootstock obtained from *Cynodon dactylon* contains considerable starch and smaller endodermis cells. Furthermore, the scales of the rootstocks of *Cynodon dactylon*, which are often, or usually, pubescent, are thinner and larger than those of *Agropyron repens*. The department will recommend the exclusion from the United States of any shipment labeled "Couchgrass" consisting wholly or in part of "Bermuda Grass."

## 233. DANDELION ROOT ADULTERANT. (LACTUCA SPECIES.)

Examination of samples of importations of "Dandelion Root," *Taraxacum officinale* Weber, has disclosed that in some instances roots obtained from a *Lactuca* species, very probably *Lactuca canadensis* L., or *Lactuca spicata* (Lam.) Hitchc., have been substituted for the true material. The root of *Taraxacum officinale* may be distinguished by the concentrically arranged groups of laticiferous vessels and sieve tubes, which alternate with whitish inulin-bearing parenchyma. *Lactuca* root is characterized by its tracheæ which are arranged in radial rows, usually one cell wide, alternating with medullary rays two or three cells wide. The department will recommend the exclusion from the United States of any shipment labeled "Dandelion Root," consisting wholly or in part of roots of *Lactuca* species.

## 234. FENNEL ADULTERANT. (BITTER FENNEL.)

Examination of samples of importations of "Fennel Seed" *Foeniculum vulgare* Miller, has disclosed that bitter fennel, *Foeniculum piperitum* Sweet, has been substituted in some instances for the true material. This species is not cultivated and may be distinguished from *Foeniculum vulgare* by its very much smaller size and the decidedly bitter taste and flavor of its volatile oil. The department will recommend the exclusion from the United States of any shipment labeled "Fennel Seed," consisting wholly or in part of bitter fennel.

## 235. JUNIPER BERRIES. (CONTAINING DISCOLORED OR WITHERED BERRIES.)

Examination of shipments of Juniper Berries, *Juniperis communis* L., offered for import has disclosed that in many instances a considerable number of the berries were discolored and withered. The department will recommend the detention of Juniper Berries found to contain more than 10 per cent of immature, discolored, and withered berries, or foreign material.

## 236. ALFALFA MEAL.

In the opinion of the bureau Alfalfa Meal is composed of ground alfalfa hay. A product composed in whole or in part of ground alfalfa straw (i. e., alfalfa from which the seed has been threshed) is regarded as adulterated and misbranded if sold or labeled as Alfalfa Meal.

## 237. GROUND COTTONSEED HULLS.

In the opinion of the bureau a product made by grinding cottonseed hulls should be labeled and sold as ground cottonseed hulls. The use of such a label as "Cottonseed Hull Bran" is regarded as misleading on the ground that it indicates that the product corresponds to the well-known bran of wheat. A label such as "Cotton-



seed Feed" is also regarded as misleading in that it indicates that the product is a mixture of cottonseed meal and cottonseed hulls.

#### 238. SANITARY QUALITY OF WATERS.

The bureau, in the enforcement of the Food and Drugs Act, believes that the requirements established by the Public Health Service of the Treasury Department for waters served on interstate carriers are none too rigid for application to waters sold in interstate commerce or imported from foreign countries. The Treasury Department standards are as follows:

1. The total number of bacteria developing on standard agar plates, incubated 24 hours at 37° C., shall not exceed 100 per cubic centimeter; provided that the estimate shall be made from not less than two plates, showing such numbers and distribution of colonies as to indicate that the estimate is reliable and accurate.
2. Not more than one out of five 10 cc portions of any sample examined shall show (by the method of the Public Health Service) the presence of organisms of the bacillus coli group.

Furthermore, the water must be of good quality when judged by the results of the sanitary chemical analysis, special significance being attributed to the presence of nitrite, to free ammonia in excess of 0.05 milligram per liter, and to an undue amount of organic matter.

#### 239. PHOSPHATE BEVERAGES.

Examination of certain products sold or labeled as phosphate beverages shows the presence of little or no phosphoric acid or acid phosphate. A product sold or labeled as a phosphate beverage which does not contain an appreciable amount of phosphoric acid or acid phosphate will be regarded by the department as in violation of the Food and Drugs Act. This is not intended to exclude, in products of the above character, the use of other acid material commonly used in the preparation of beverages, provided such addition does not result in the introduction of any poisonous or deleterious ingredient.

#### 240. LABELING OF JAVA TEAS.

The question has been asked whether Java black teas similar in character and flavor to black Ceylon teas could be labeled and sold as the latter without violation of the Food and Drugs Act. It is the opinion of this bureau that teas grown in Java would be misbranded within the meaning of the Food and Drugs Act, section 8, general paragraph, if labeled Ceylon teas.

#### 241. ORGEAT OR "ORZATA" SIRUP.

The bureau is of the opinion that an article which is prepared essentially from sugar (sucrose) sirup and milk of almonds is alone

entitled to be termed Orgeat or "Orzata" sirup without qualification. The sale as Orgeat or "Orzata" sirup of articles which are flavored with oil of bitter almonds and in the preparation of which gum benzoin or a similar substance has been substituted for milk of almonds, thereby producing the turbidity characteristic of milk of almonds, is, in the opinion of the bureau, a violation of the Food and Drugs Act. Such products should be designated as imitation Orgeat or "Orzata" sirup.

#### 242. LIQUEURS.

There are certain types of liqueurs such as "Anesone," "Doppelt-Kuemmel," "Allasch," which are characterized by an unusually high alcoholic proof and an unusually high content of essential oils. Liqueurs that are branded with names belonging to representatives of these types should possess the strength of essential oil and the alcoholic proof which are characteristic of their respective types. Liqueurs of a lesser strength of essential oil or lower alcoholic proof, labeled in a manner characteristic of the above types of liqueur, would be regarded as in violation of the Food and Drugs Act.

#### 243. MISUSE OF THE TERM "CRAB APPLE."

The application of terms such as "Crab Apple Cider" and "Crab Apple Compound" to ordinary apple juice, either with or without the addition of citric, tartaric, or other added acid, is regarded as misleading to the purchaser, and such labeling will be considered as misbranding under the Food and Drugs Act.

#### 244. GRATED PINEAPPLE PRODUCTS.

It has been the practice of some manufacturers to make use of the cores and trimmings of pineapples by grating them to a finely divided condition and cooking them with water or pineapple juice, with or without the addition of sugar and the solid flesh of the pineapple, canning this product and selling it under names which are not properly descriptive of the product, and in some cases are misleading to the purchaser. In case trimmings are used, there are usually present portions of the "eyes" and the horny skin leading inward to the "eye."

Cores and trimmings of such character are inferior portions of the pineapple. Regulation 26 of the Rules and Regulations for the Enforcement of the Food and Drugs Act states that products made from "refuse materials, fragments, or trimmings" should be labeled in such a way as to indicate the nature of the material used. It is the opinion of the bureau that the product described above can not properly be labeled "Canned Pineapple," "Grated Pineapple," "Pie

Grated Pineapple," or with similar terms, unless the labels bear, in addition, further descriptive matter clearly indicating the character of the materials used. The above terms, without modification, are held to apply only to products prepared wholly from the flesh of the sound, mature pineapple, excluding the core.

245. PEELING OF FRUITS AND VEGETABLES BY CHEMICAL TREATMENT.

Certain fruits and vegetables are readily peeled by the use of lye or other chemicals. It appears immaterial to the bureau whether such fruits or vegetables are peeled by cutting or by chemical means provided that the food product, in any instance, is not changed in composition or properties by the operation, as might result, for example, by insufficient washing after lye peeling.

Any treatment which leaves skin, whether from incomplete removal of all the layers of skin or otherwise, is not considered sufficient to entitle the product to be called "peeled." For example, in case of a product sold as "Peeled Peaches" the entire skin should be removed, and the sale as "Peeled Peaches" of fruit which still contains a considerable proportion of the skin would be considered misleading and, therefore, misbranding under the Food and Drugs Act.

246. USE OF THE TERM "LIMA BEANS." (SUPPLEMENTING ITEM 115, S. R. A. CHEM. 13, P. 5.)

Examination of shipments of beans offered for entry as "Chilean Lima Beans" showed that they were not derived from a variety of Lima bean, *Phaseolus lunatus* L., but were obtained from an entirely different species, *Phaseolus multiflorus* Willd. These beans are properly called "Spanish Beans," or "Pallares," a name by which they are known in Chile. The department will recommend the detention of any shipment of "Lima Beans" obtained from species other than *Phaseolus lunatus* L.

247. "SMOKED" FOOD PRODUCTS.

In the opinion of the bureau, the term "smoked" appearing on the labels of food products conveys the impression that the products have been prepared by the customary process of subjecting them to the action of wood smoke. Food products labeled or sold as "smoked" will be regarded as misbranded under the Food and Drugs Act unless they have been prepared in this manner. Likewise the bureau considers that the use of similar terms which imply that the product has been smoked is misleading in case of products not so treated and that the products accordingly would be misbranded.



## 248. WRAPPED HAMS AND BACON NOT CONSIDERED "IN PACKAGE FORM."

In response to applications for a reconsideration of the opinion published by the department in Service and Regulatory Announcement, Chemistry 6, page 416, to the effect that single hams and single sides or strips of bacon covered with paper, cloth, or gelatin are not "in package form" within the meaning of the amendment of March 3, 1913, to the Food and Drugs Act, a general hearing was held on March 8, 1916. The evidence presented was referred by the department to the Attorney General for consideration of the question involved. Under date of August 28, 1917, an opinion was received from the Attorney General as follows:

AUGUST 28, 1917.

The honorable the SECRETARY OF AGRICULTURE.

SIR: I have the honor to comply with the request contained in your letter of January 15, 1917, for my opinion on the question whether single hams and single sides of bacon wrapped or covered with paper, cloth, or gelatin are "in package form" within the meaning of the act of March 3, 1913 (37 Stat., 732), commonly known as the Net Weight Amendment to the Food and Drugs Act (34 Stat., 768). The rendition of the opinion was delayed at the request of the solicitor of the Department of Agriculture pending informal conferences between him and this department. The solicitor has now requested, by letter dated the 21st instant, that the opinion be rendered as soon as convenient.

The Net Weight Amendment provides in substance that an article of food shall be deemed to be misbranded under the Food and Drugs Act:

If in package form, the quantity of the contents be not plainly and conspicuously marked on the outside of the package in terms of weight, measure, or numerical count: *Provided, however,* That reasonable variations shall be permitted, and tolerances and also exemptions as to small packages shall be established by rules and regulations made in accordance with the provisions of section three of this Act.

It appears from your letter that in Service and Regulatory Announcements, Chemistry No. 6, issued July 17, 1914, the Department of Agriculture, which is charged with the administrative enforcement of the Food and Drugs Act, ruled that single hams and single sides of bacon wrapped or covered with paper, cloth, or gelatin are not "in package form" within the meaning of the Net-Weight Amendment. This ruling has been in effect continuously.

While, as is usually the case where elastic words have to be construed, there is more than one side to the question, I am certainly not prepared to say that the construction adopted by the Department of Agriculture is clearly erroneous; and where the department of Government primarily charged with the enforcement of a statutory provision has adopted a construction and that construction has been in practical operation for several years, I do not think that the Attorney General should disturb it unless of opinion that it is clearly erroneous. (*United States v. Philbrick*, 120 U. S., 52, 59; *United States v. Moore*, 95 U. S., 760, 763; *United States v. Hammers*, 221 U. S., 220, 228-229; *Illinois Surety Co. v. United States*, 215 Fed., 334, 338 (C. C. A., 4th Cir.); 27 Ops. A. G., 446; 26 Ops. A. G., 390; 20 Ops. A. G., 358; 20 Ops. A. G., 719.)

Respectfully,

T. W. GREGORY, *Attorney General.*

249. TREASURY DECISION 37292. WEIGHT OF OLIVE OIL. THE CONVENTIONAL WEIGHT OF 7.61 POUNDS ADOPTED FOR A GALLON OF IMPORTED OLIVE OIL. IF NOT ACCEPTED BY THE IMPORTER, DUTIABLE QUANTITY TO BE ASCERTAINED.

TREASURY DEPARTMENT, *July 26, 1917.*

*To collectors of customs and others concerned:*

The department is informed by the Department of Agriculture that a determination of the specific gravity of over 500 samples of imported olive oil indicates that the weight of a standard United States gallon of olive oil at 68° F. (20° C.) varies between 7.564 pounds and 7.649 pounds, the average being 7.61 pounds, and that for all commercial purposes the average value of 7.61 pounds may be taken as the weight of a gallon of olive oil at 68° F. (20° C.).

In view of these tests, 7.61 pounds is hereby adopted as the conventional weight of a gallon of olive oil, and such weight should be used in ascertaining the dutiable quantity of imported olive oil, provided that the importer assents thereto by noting his acceptance of the conventional weight on the entry. In the absence of such notation on the entry, the dutiable quantity of imported olive oil will be ascertained by determining the actual weight per gallon of the contents of one or more of the containers of each brand, and the weight per gallon thus found applied to the entire importation.

L. S. ROWE, *Assistant Secretary.*

250. STATEMENT OF THE QUANTITY OF CONTENTS IN TERMS OF FRACTIONAL PARTS OF LARGER UNITS.

The bureau is of the opinion that in certain instances statements of the quantity of the contents in terms of fractional parts of larger units are not plain, with especial reference to paragraph (d) of Regulation 29, which admits of the use of such common fractions only as are in general use. The bureau is of the opinion that this precludes the use of such fractions as five thirty-seconds ( $5/32$ ), the relation of which to the nearest corresponding unit of liquid measure is not obvious.

251. STATEMENT OF QUANTITY OF CONTENTS ON SALMON SAUSAGE IN CANVAS SACKS.

Inquiries have been received as to the proper method of indicating the quantity of the contents, as required by the Net Weight Amendment, on salmon sausage which is packed in canvas "casings," and dipped in paraffin, each sausage weighing about  $2\frac{1}{2}$  pounds.

The bureau is of the opinion that this article should be considered as food in package form, and that the quantity of the contents should be marked upon the canvas sacks. If the salmon sausage in cloth



containers is inclosed in a loose temporary paper or parchment wrapper, such temporary paper or parchment wrapper need not bear a statement of the quantity of the contents, but the required statement should appear upon the cloth container. If the wrapping is sealed upon the package or if of a permanent character, the quantity of the contents should appear upon the outside of the package.

252. STATEMENT OF QUANTITY OF CONTENTS. (SUPPLEMENTING OP. 61, S. R. A. CHEM. 7, P. 526.)

The department has received a request for information as to whether, in view of Food Inspection Decision 154, Regulation 29, paragraph (a), the Net Weight Amendment to the Food and Drugs Act requires the net contents to be marked on barrels, boxes, and crates containing various food products which are sold to wholesale dealers in large quantities, and which seldom reach the consumer in the original packages. The regulation to which reference is made is as follows:

(a) Except as otherwise provided by this regulation, the quantity of the contents, in all cases of food, if in package form, must be plainly and conspicuously marked, in terms of weight, measure, or numerical count, on the outside of the covering or container usually delivered to consumers.

In the opinion of the department the purpose of this regulation was not to limit the marking of the net contents to packages which are usually delivered to consumers, but to inform shippers that it would not be sufficient to mark such contents on the shipping packages alone. It will be noted from Food Inspection Decision 168 that the act has been construed as applying to standard barrels containing food products shipped in interstate commerce.

With reference to the marking of the net contents on retail packages only which are usually delivered to the consumer, this department has required the marking of such contents on all food if in package form, whether wholesale or retail. Should exception be made in favor of wholesale packages, protection equal to that guaranteed to the ultimate purchaser or consumer would not be afforded manufacturers who buy in large quantities for the purpose of combining the article with other products in the manufacture of different kinds or classes of food.

253. THE LABELING OF VARIOUS PACKAGES OF FRUITS AND VEGETABLES WITH THE QUANTITY OF THE CONTENTS.

The following suggestions are made in response to numerous inquiries for information as to the proper methods of marking the quantity of the contents on packages of various fresh fruits and



vegetables under the Net Weight Amendment to the Food and Drugs Act.

The articles listed below may be marked by either weight or dry measure, or when packed in barrels, in terms of the United States standard barrel and its lawful subdivisions, i. e., third, half, or three-quarters:

Apples in barrels, boxes, cartons, and hampers. Cases or cartons containing graded apples may, if desired, be marked in addition with the number of apples per package.

Apricots, prunes, and plums in baskets, boxes, and cases. (When packed in small open containers inclosed in crates, see paragraph relating to small open containers.)

Beans (in pod) in baskets, boxes, and hampers.

Berries and currants in baskets. (When packed in small open containers inclosed in crates, see paragraph relating to small open containers.)

Cherries in boxes and baskets. (When packed in small open containers inclosed in crates, see paragraph relating to small open containers.)

Cucumbers in barrels, baskets, hampers, boxes, and crates. Containers of graded cucumbers may, if desired, be marked in lieu of weight or dry measure, with the number and length of the cucumbers.

Grape fruit in sectional cases. If desired, cases may be marked by dry measure and count; or by count and average diameter in lieu of weight or dry measure.

Grapes in baskets. (When packed in small open containers inclosed in crates, see paragraph relating to small open containers.)

Lemons in sectional cases. If desired cases may be marked by dry measure and count; or by count and average diameter in lieu of weight or dry measure.

Okra in baskets, boxes, and hampers.

Onions in crates, baskets, and hampers, and in sacks of uniform quantity of contents. Cases containing graded onions may, if desired, be marked in addition with the number of onions per case.

Oranges in sectional cases. If desired, cases may be marked by dry measure and count; or by count and average diameter in lieu of weight or dry measure.

Oranges, satsumas, and tangerines in half boxes. If desired, cases may be marked by dry measure and count; or by count and average diameter in lieu of weight or dry measure.

Peaches in boxes, cases, baskets, and hampers. Boxes and cases of graded peaches may, if desired, be marked in addition with the number of peaches per package. (When packed in small open containers inclosed in crates, see paragraph relating to small open containers.)

Pears in barrels, boxes, baskets, and hampers.

Peas (in pod) in baskets, boxes, and hampers.

Peppers in barrels, baskets, boxes, and hampers. (When packed in small open containers inclosed in crates, see paragraph relating to small open containers.)

Potatoes in barrels, crates, and hampers, and in sacks of uniform quantity of contents.

Quinces in barrels, boxes, baskets, and hampers.

Squash (southern) in crates, boxes, baskets, and hampers.

Tomatoes in boxes, "lugs," and baskets. (When packed in small open containers inclosed in crates or "flats," see next paragraph.)

Small open containers.

Pending a determination of the question as to whether the quantity of the contents must be marked on small open containers, inclosed within crates or "flats," in which small open containers are packed apricots, berries, currants, cherries, grapes, peaches, plums, prunes, peppers, and tomatoes, and unless public notice of not less than two months be given, the department will not recommend proceedings under the Food and Drugs Act solely upon the ground that such fruits and vegetables in such small containers bear no statement of the quantity of contents. The crates inclosing such containers should, however, be marked with the number of small containers and the quantity of the contents of each.

Also, for the present and until further public notice to the contrary of not less than two months, the department will not recommend proceedings under the Food and Drugs Act solely upon the ground that the quantity of the contents is not marked upon the containers of the following articles, packed as described below. No objection will be interposed by the department to any trade-marking which is not false or misleading.

Asparagus in boxes and cases.  
Beets with tops, bunched, in drums and hampers.  
Cabbages in crates.  
Cantaloupes and casabas in crates and baskets.  
Carrots with tops, bunched, in drums and hampers.  
Cauliflower in crates and hampers.  
Celery in boxes and crates.  
Eggplant commonly wrapped in paper and packed in crates.  
Kale in barrels, baskets, and hampers.  
Lettuce in barrels, drums, baskets, and hampers.  
Onions, with tops, bunched, in drums and hampers.  
Pineapples in crates.  
Radishes, bunched, in drums and hampers.  
Romaine in hampers.  
Spinach in barrels, baskets, and hampers.  
Turnips with tops in drums and hampers.

Regulation No. 29 relating to marking the quantity of food in package form should be consulted. Special attention is directed to paragraphs (d) and (e) of that circular, which are as follows:

(d) If the quantity of the contents be stated by weight or measure, it shall be marked in terms of the largest unit contained in the package, except that, in the case of an article with respect to which there exists a definite trade custom for marking the quantity of the article in terms of fractional parts of larger units, it may be so marked in accordance with the custom. Common fractions shall be reduced to their lowest terms; decimal fractions shall be preceded by zero and shall be carried out to not more than two places.

(e) Statements of weight shall be in terms of avoirdupois pounds and ounces; statements of liquid measure shall be in terms of the United States gallon of 231 cubic inches and its customary subdivisions, i. e., in gallons, quarts, pints, or

fluid ounces, and shall express the volume of the liquid at 68° F. (20° C.); and statements of dry measure shall be in terms of the United States standard bushel of 2,150.42 cubic inches and its customary subdivisions, i. e., in bushels, pecks, quarts, or pints; or, in the case of articles in barrels, in terms of the United States standard barrel and its lawful subdivisions, i. e., third, half, or three-quarters barrel, as fixed by the act of March 4, 1915 (38 U. S. Stat. L., p. 1186): *Provided*, That statements of quantity may be in terms of metric weight or measure. Statements of metric weight should be in terms of kilograms or grams. Statements of metric measure should be in terms of liters or centiliters. Other terms of metric weight or measure may be used if it appears that a definite trade custom exists for marking articles with such other terms and the articles are marked in accordance with the custom.

**254. REGULATION 29, RELATING TO MARKING THE QUANTITY OF FOOD IN PACKAGE FORM.**

Regulation 29, as amended by Food Inspection Decisions 154, 157, 163, and 168, has been printed as a separate circular, copies of which are available on application to the Bureau.

**255. FOOD AND DRUG INSPECTION STATIONS OF THE BUREAU OF CHEMISTRY.**

| District and station.                      | Station chief.                         | Location.  |
|--|--|--|
| <b>Eastern District:</b>                   |  |  |
| District Headquarters, New York, N. Y.     | Benjamin R. Hart <sup>1</sup> .....    | United States Appraiser's Stores, Christopher and Washington Streets.      |
| Station Headquarters:                      |  |  |
| Washington, D. C.....                      | Arthur L. Sullivan.....                | Bureau of Chemistry, 216 Thirteenth Street SW.                             |
| New York, N. Y.....                        | Albert F. Seeker.....                  | United States Appraiser's Stores, Christopher and Washington Streets.      |
| Boston, Mass.....                          | Edward J. Shanley.....                 | 88 Broad Street.   |
| Philadelphia, Pa.....                      | Arthur Stengel.....                    | United States Appraiser's Stores.  |
| Buffalo, N. Y.....                         | William A. Bender.....                 | Federal Building.  |
| Savannah, Ga.....                          | Harvey H. Wagner.....                  | Customhouse.   |
| San Juan, P. R.....                        | John A. MacLaughlin.....               | Post-Office Building.  |
| <b>Central District:</b>                   |  |  |
| District Headquarters, Chicago, Ill.       | Roscoe E. Doolittle <sup>1</sup> ..... | 1625 Transportation Building, Dearborn and Harrison Streets.               |
| Station Headquarters:                      |  |  |
| Chicago, Ill.....                          | George W. Hoover.....                  | Do.  |
| Minneapolis, Minn.....                     | Harry H. Walters.....                  | 310 Federal Office Building, Third Street and Marquette Avenue.            |
| Cincinnati, Ohio.....                      | Leo B. Forst.....                      | 411 Government Building.   |
| St. Louis, Mo.....                         | William R. M. Wharton.....             | Old Customhouse.   |
| New Orleans, La.....                       | Frank W. Liepsner.....                 | United States Customhouse.   |
| Kansas City, Mo.....                       | Jackson E. Earnshaw.....               | 402 Post-Office Building.  |
| <b>Western District:</b>                   |  |  |
| District Headquarters, San Francisco, Cal. | Roy W. Hilts <sup>1</sup> .....        | Room 33, United States Appraiser's Stores, Sansome and Washington Streets. |
| Station Headquarters:                      |  |  |
| San Francisco, Cal.....                    | .....                                  | Do.  |
| Denver, Col.....                           | Robert S. Hiltner.....                 | Tabor Opera House Building.  |
| Seattle, Wash.....                         | Wendell Vincent.....                   | Arcade Building.   |
| Honolulu, Hawaii.....                      | Arthur W. Hansen.....                  | Board of Health Building.  |

<sup>1</sup> Chief of district.

The dividing line between the Eastern and Central Districts runs along the western boundaries of Pennsylvania and West Virginia and follows State lines south, including Georgia and Florida in the Eastern District. The dividing line between the Central and Western Districts runs south on the State lines, following the eastern boundary of Montana, including the whole of Colorado in the Western District and the whole of Texas in the Central District.



## 256. STATE DAIRY, FOOD, DRUG, AND FEEDING STUFFS OFFICIALS.

The following additional changes among State officials have been noted since the announcement of changes in the Directory of Federal and State Dairy, Food, Drug, and Feeding Stuff Officials in S. R. A. Chem. 20, p. 65.

*Idaho*.—Edw. Rhodenbaugh,<sup>1</sup> State Chemist, State Board of Health, Boise, succeeding H. Louis Jackson.

*Illinois*.—J. B. Newman,<sup>2</sup> Superintendent, Division of Foods and Dairies, Department of Agriculture, 1410 Kimball Building, Chicago, in charge of foods and feeding stuffs, succeeding W. Scott Matthews.

*Indiana*.—E. G. Proulx, Acting State Chemist, Purdue Agricultural Experiment Station, Lafayette, in charge of feeding stuffs, succeeding W. J. Jones, jr. (deceased).

*Minnesota*.—James Sorensen,<sup>2</sup> Dairy and Food Commissioner, New Capitol, St. Paul, in charge of dairying, foods, and feeding stuffs, succeeding J. J. Farrell.

*Ohio*.—Azor Thurston,<sup>1</sup> Ohio State University, Columbus succeeding William McPherson. Thos. C. Gault,<sup>2</sup> Chief, Dairy and Food Division, State Board of Agriculture, Columbus, succeeding T. L. Calvert.

*Philippine Islands*.—J. D. Long, Director of Health, Philippine Health Service, Manila.

*West Virginia*.—S. L. Jepson, Commissioner of Health, Department of Health, Charleston, in charge of foods and drugs.

*Wisconsin*.—C. P. Norgord,<sup>3</sup> Commissioner of Agriculture, Department of Agriculture, Madison, in charge of feeding stuffs, succeeding H. L. Russell.

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<sup>1</sup> Collaborating chemist.

<sup>2</sup> Commissioned State official.

<sup>3</sup> Change occasioned by change in State law governing feeding stuffs.

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